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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,271	09/03/2002	Thomas Niehr	F-7322	5161

28107 7590 12/22/2003  
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EXAMINER

CHORBAJI, MONZER R

ART UNIT PAPER NUMBER

1744

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/089,271

Applicant(s)

NIEHR ET AL.

Examiner

MONZER R CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, line 3; applicant uses the term "conveying cycle". The meaning of this term is not clear. The specification does not explain the meaning of such a limitation. Clarification is needed to understand the meaning of claim 7. The same applies to claim 8.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined

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under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 5-8, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Palaniappan et al (U.S.P.N. 6,120,730).

With respect to claim 1, Palaniappan et al teaches a method for sterilizing plastic bottles (abstract, lines 1-3 and lines 11-12) including the following: conveying path periodically (figure 1, 24 and col.4, lines 46-48), hydrogen peroxide aerosol (col.2, lines 19-20), heating hydrogen peroxide to a starting temperature (col.5, lines 30-31), hydrogen peroxide is blown into the interior of the bottles (figure 1, 63 and 50), a hydrogen peroxide condensate film is formed (col.2, lines 38-43), sterile air (col.2, lines 45-47) with an activation temperature higher than the starting temperature is blown into the interior of the bottles (col.5, lines 39-43) until the condensate has evaporated, and renewed blowing of sterile air (col.5, lines 62-67 and col.6, lines 1-2) to expel residues of hydrogen peroxide.

With respect to claim 5, Palaniappan et al teaches that the hydrogen peroxide and the sterile air are separate (figure 1, 64 and 113) such that after applying hydrogen peroxide then sterile is blown in and both are mixed together within bottles.

With respect to claims 6-8, Palaniappan et al teaches the following: hydrogen peroxide (figure 1, 28 and 50) is introduced into the interior of the bottles in two separate (since there are two conduits in figure 1, 63 and 64), consecutive steps (figure 1, 63 and 64), pausing before blowing sterile air heated

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to the activation temperature (col.4, lines 40-43 such that bottles are advanced in one step conveying cycle then paused then advanced and so on), and sterile air is blown in two separate steps corresponding to one conveying cycle (figure 1, 34 and 36).

With respect to claim 10, Palaniappan et al blowing sterile air (col.5, lines 66-67), which has been heated to a lower temperature than sterile air heated to the activation temperature (col.5, lines 42-43).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

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Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palaniappan et al (U.S.P.N. 6,120,730).

With respect to claims 12-14, Palaniappan et al method involves blowing sterile air inside bottles over a period of time in order to dry the interior of such bottles such that the flow rate and the application periods are intrinsic to the method. Since both the instant claims and the Palaniappan et al reference are accomplishing the same goal, then such values of flow rate and application time range are intrinsic to the Palaniappan et al reference.

With respect to claim 15, Palaniappan et al method intrinsically applies a certain amount of hydrogen peroxide to the interior of bottles in order to sterilize the bottles. Since both the instant claims and the Palaniappan et al reference are accomplishing the same goal, then the amount of hydrogen peroxide used is intrinsic to the Palaniappan et al reference in order to sterilize plastic bottles.

10. Claims 2-4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palaniappan et al (U.S.P.N. 6,120,730) in view of Dronet (FR 2666299).

With respect to claims 2-4 and 11, Palaniappan et al fails to disclose the following: fogging hydrogen peroxide into an aerosol at ambient temperature,

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heating hydrogen peroxide to a temperature of about 60 to 90 degree Celsius, the heated hydrogen peroxide is further heated to the sterilization starting temperature on the way to the interior of the bottles, and the lower temperature of the sterile air is about 75 to 85 degree Celsius. However, with regard to claims 2-4 and 11, Dronet teaches the following: fogging hydrogen peroxide into an aerosol at ambient temperature (abstract, lines 2 and 6-7); heating hydrogen peroxide to a temperature of about 60 to 90 degree Celsius (use/advantage, lines 3-4), the heated hydrogen peroxide is further heated to the sterilization starting temperature on the way to the interior of the bottles (hydrogen is heated during the nebulizing process and further heated air is used to further warm the hydrogen peroxide on its way to the bottles), and the lower temperature of the sterile air is about 75 to 85 degree Celsius (use/advantage, lines 3-4). Thus, it would have been obvious to one having ordinary skill in the art to modify the method of Palaniappan et al to include a warm air at about 80 degree Celsius since such a temperature is the optimum temperature for hydrogen peroxide sterilization (Dronet, use/advantage, lines 3-4).

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palaniappan et al (U.S.P.N. 6,120,730) in view of Reinecke (DE 3339930).

With respect to claim 9, Palaniappan et al fails to teach heating sterile air to a temperature range of about 90 to 120 degree Celsius. Reinecke discloses heating air to a temperature range between 100 to 110 degree Celsius (Reinecke, abstract, lines 4-5). Thus, it would have been obvious to one having ordinary skill in the art to modify the method of Palaniappan et al to include a

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step for heating air to a temperature of at least 100 degree Celsius in order for the heated air to act as the carrier (Reinecke, abstract, lines 4-5).

**Conclusion**

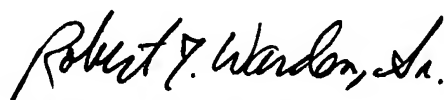
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 8:30-5:00.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Monzer R. Chorbaji  
Patent Examiner  
12/04/2003



  
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